



1-800-330-0857

TSB100610

## TECHNICAL SERVICE BULLETIN

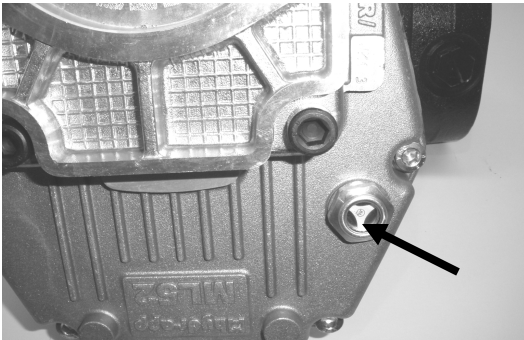
**SUBJECT: Increaser maintenance on all models equipped with a two-stage hydraulic pump and Brevini increaser**

The Brevini increaser by nature operates under severe conditions. The increaser gearbox is under constant heavy load, in an extremely hot, dirty and abrasive environment.

To prevent premature increaser, coupling or hydraulic pump failure, please observe the following maintenance procedures.

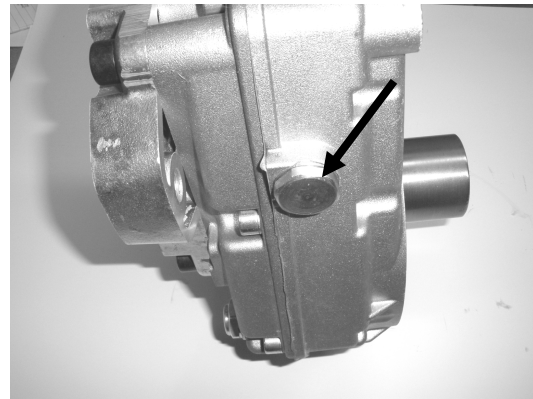
### Daily Maintenance

Each day, prior to operating the harvester, inspect the sight glass (**Figure 1**) on the increaser.



**Figure 1—View showing the increaser sight glass.**

The lubricant should be visible in the sight glass. If necessary, remove the plug (**Figure 2**) and add gear lubricant. The recommended lubricant is synthetic 75W-140 gear lube.



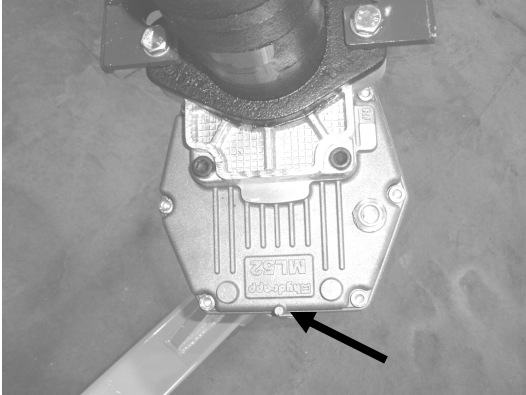
**Figure 2—Remove the plug to add lubricant to the increaser.**

Inspect the gasket on the plug and replace if not in acceptable condition. Tighten the plug securely but do not over tighten.

### 50/100 Hour Service

On new increaser assemblies, change the gear lubricant after the initial 50 hours of operation and after each 100 hours thereafter. To change the increaser lubricant, proceed as follows:

1. Start the tractor and engage the pto for approximately 10 minutes to ensure that the oil is warm.
2. Place a suitable container under the increaser and remove the plug (**Figure 3**).



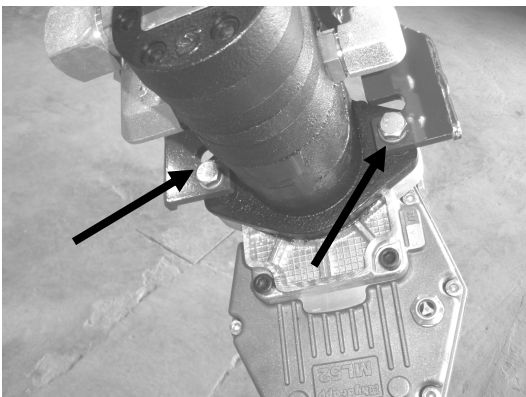
**Figure 3—Inverter drain plug.**

3. Allow the oil to completely drain. Inspect the gasket on the plug and replace it if not in acceptable condition.
4. Install and tighten the plug securely.
5. Remove the fill plug (**Figure 2**).
6. Add one pint (0.05 l) of a good quality synthetic 75W-140 gear lube.
7. Inspect the fill plug gasket and replace it if necessary. Install the plug securely.

### *Splined coupling service*

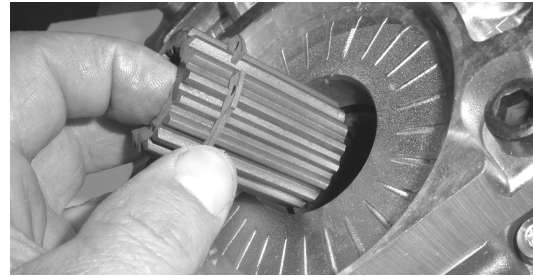
After each 100 hours of operation, remove the hydraulic pump from the inverter. Remove, clean and lubricate the splined coupling.

1. Remove the two fasteners that secure the pump to the inverter. See **Figure 4**.

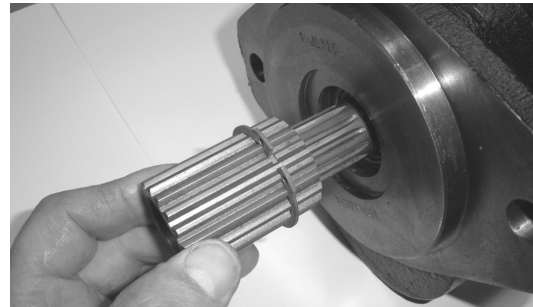


**Figure 4—Remove the two fasteners shown to disconnect the hydraulic pump from the inverter.**

2. Separate the pump from the inverter and locate the splined coupling. It may remain in the inverter (**Figure 5**) or on the pump shaft (**Figure 6**). Pull the coupling out of the inverter or off the pump shaft as necessary.

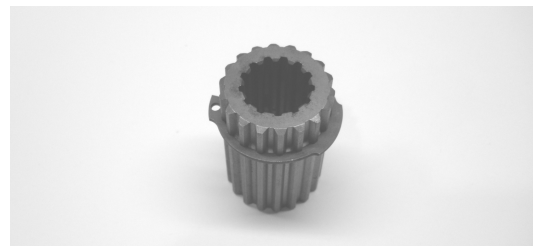


**Figure 5—Remove the splined coupling from the inverter as shown.**



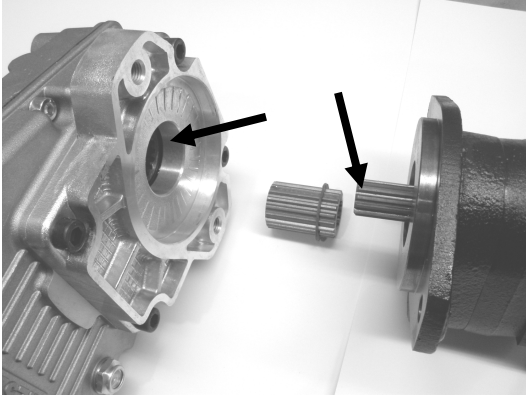
**Figure 6—View showing coupler removal from the pump shaft.**

3. Thoroughly clean and inspect the coupling (**Figure 7**). Check closely for excessively worn outer and inner splines, cracks or other damage.



**Figure 7—Inspect coupling for cracks, excessive wear or other damage.**

4. Thoroughly clean and inspect the hydraulic pump shaft and internal splines in the inverter (**Figure 8**).



**Figure 8—Inspect the pump shaft and increaser splines for excessive wear or damage.**

5. Coat the inner and outer splines of the coupling, hydraulic pump shaft and internal splines of the increaser with good quality grease. Use grease certified NLGI No. 2 that contains extreme pressure (EP) additives.
6. With the snap ring facing outward, insert the coupling into the increaser. Make sure the coupling is fully seated inside the increaser.

7. Align the pump shaft and coupling splines and attach the pump to the increaser. Install the two fasteners and tighten to 75 ft.-lbs. (102 N.m).
8. Thoroughly coat the tractor pto shaft with grease certified NLGI 2 prior to installing the increaser and pump assembly.

### **PTO Shaft Maintenance**

If allowed to operate without lubrication, the tractor pto shaft and the increaser shaft will be damaged. Therefore, it is extremely important to periodically lubricate the pto shaft splines and the increaser internal splines. After each 50 hours of operation, remove the increaser/hydraulic pump assembly from the tractor. Using NLGI 2 EP type grease, thoroughly lubricate the tractor pto shaft and the internal pto splines in the increaser.